Key Case

ICE STORM: A Crisis Management Diary

By Dave G. Hunter, Delores MacDonald, Linda Peever

During January's ice storm which ravaged Eastern Ontario and Quebec, senior managers at Brockville Psychiatric Hospital (BPH) learned invaluable lessons for dealing with an unprecedented crisis. By the end of the storm, the biggest and longest-lasting natural disaster in Canadian history, the hospital would house more than 400 guests in need of shelter, provide accommodation and meals to more than 300 military personnel, meals to 50 Ontario Hydro workers, and shower facilities to an additional 150 military personnel.

The setting for all this activity is a typical large provincial psychiatric hospital. BPH, an accredited psychiatric teaching facility affiliated with the University of Ottawa Faculty of Medicine, is mandated to provide service to the seriously mentally ill in Eastern Ontario. It offers a wide range of hospital and community-based in-patient and out-patient services to approximately 1300 patients.

The Storm Begins

By all appearances, Wednesday, January 7, 1998 was a normal Eastern Ontario winter day with, as often happens, a forecast for freezing rain. By mid-afternoon the prediction proved correct and BPH received the first indication that this weather disturbance might be something different. A Home for Special Care (group home) located 100 km east of Brockville (population 21,000) was without power and required the relocation of 19 residents. By supper time, BPH had dispatched the hospital bus and staff to transfer the residents to Brockville. During the night, all of Brockville and surrounding area lost electrical power.

DAY 1 2 3 4 5

At 7:00 a.m. Thursday it was reported that electricity should be re-established by Saturday, in some areas earlier. Enough staff members were reporting for work that staffing levels were considered adequate. It was felt there might be a limited need for more shelter space – for example, if another group home had no source of heating – and it was determined that we had the resources to set up a currently vacant ward. The senior management team determined it would be "overkill" to implement the formal and complex emergency protocol.

What was particularly relevant in this emergency was the hospital generator's capacity to provide full power with no reduction in lighting or use of electrical equipment. In addition to affording us the opportunity to provide shelter, this capacity also resulted in, at one point, the hospital having the only operational gas pump in the entire city. As a result, gasoline was provided by the hospital for community emergency purposes. (In addition, we had the somewhat embarrassing situation of having a large lighted Christmas tree while the rest of the city was essentially in total darkness.)

By midnight of the first full day, full-scale emergency procedures were in place in the community, including having BPH designated an emergency receiving shelter for seniors. There were now 125 guests in the hospital, consisting of seniors, seriously mentally ill persons from various forms of supported housing, and residents of a group home for the developmentally delayed. We were also on standby for two long-term care facilities facing imminent evacuation.

Throughout the first day, the nursing office evolved into a make-shift control centre, dealing with staffing issues for all disciplines and most of the incoming telephone calls that the switchboard could not direct elsewhere. As a formal command centre had not been established, anybody who had any questions whatsoever ended up at this location, resulting in high noise levels and a general sense of congestion and confusion.

Even at this early stage of the storm there were supply shortages, but throughout we had little difficulty receiving orders thanks to the flexibility of suppliers. Food and provisions arrived as late as midnight. A need for additional pillows resulted in 150 being donated by two retailers in the city. By 12:30 am Friday the administrative team crashed, staying at the hospital.

DAY 1 2 3 4 5

At 5:00 am on Friday, a few minutes were afforded to consider what had happened. It was difficult to be objectively analytical of management processes while surrounded by the emotional turmoil of what now was a



full-fledged disaster. For instance, how long could staff cope with the pressure of an extraordinary work pace, with normal 8 hour shifts extending to 12, 16 or more? The long hours were also compounded with the fact that almost none of BPH's 650 staff had electricity at home, and thus most had little or no heat, no power for cooking, no hot water or perhaps no running water at all (outside the city limits). Many stores were still closed or had sold out of such necessities such as candles and batteries. Indeed, those few of us who were required to stay in the hospital 24 hours a day for up to a week were fortunate, as we had heat, food, and showers

Later on Day 2, the difficult decisions were upon us. We now had approximately 270 guests sheltered. Most were seniors, some were very frail, oxygen-dependent and unable to ambulate, thus there were wheelchair shortages everywhere. The army had delivered about 300 cots and folding beds, but a number of those with breathing difficulties could not reasonably be accommodated on these beds. To ease the situation, a number of psychiatric patients agreed to exchange their hospital beds for cots.

Teamed with BPH staff, the Red Cross handled reception functions. People chilled to the bone arrived sporadically: too many at one time, then none – very hard to plan for. The vast majority of seniors required wheelchair assistance, a few arrived with nasal catheters attached to empty portable oxygen tanks, and others were just too cold, tired and scared to ambulate. Though our hospital does use some oxygen, with so many oxygen-dependent guests our supplies were now almost depleted, and our supplier could not be reached for several hours.

DAY 1 2 **3** 4 5

On Saturday, Day 3, as the community at large was realizing the breadth of the disaster, there was increasing demand for BPH to become a full-fledged community shelter. Our staff in particular felt it was wrong for us to hold space open for seniors while children and others were in desperate situations or being crowded into less desirable shelters such as large auditoriums. These views increased tensions and caused a certain degree of disquiet for those of us trying to arrive at the right decision. As time would tell, the city emergency measures team was absolutely correct in reserving us for a designated shelter population.

The level of care to be provided to guests proved to be another contentious issue. On one side were those who viewed BPH's role as limited to the provision of food and shelter. The contrary view was that since many of the seniors had significant health-related needs, we should be providing the full range of required services. Our medical director framed the matter correctly by noting that for many, coping at home meant walking 10 feet in completely familiar territory from their bed or chair to the washroom; suddenly a new environment forced them to navigate 110 feet through strange territory to try and find a bathroom. It was further noted that shelters outside the health-care system, such as high school auditoriums, were putting in place multidisciplinary teams to assist with a whole range of health-related problems. Therefore, it would only be appropriate that we provide clinical assistance and care to the level required.

Increasingly, the question of capacity arose: the massive building, theoretically at least, could accommodate an unlimited number of people if available floor space were used for mats and sleeping bags. We determined, however, that given the needs of the clientele being directed to us, we should only use those spaces affording some degree of privacy. Once ward areas were full we would move to areas, such as classrooms and meeting rooms, with capacity for up to 30 people and some proximity to washroom and shower facilities. With these parameters we determined we could accommodate up to 500 guests, in addition to our in-house psychiatric population of 230.

Holding to this standard for seniors, we realized we were getting dangerously close to being overcommitted: in addition to the 300-plus now on site, by Day 3 we had promised space on a standby basis to several long-term care facilities. Concurrently, we knew the city was increasing its efforts to evacuate most seniors in independent living situations. Many staff members continued to feel it was wrong for us to keep any sleeping space empty while members of the public faced another night in unheated homes.

In addition to the issues of accommodation and care, pressures were mounting on our Dietary Services staff, which in addition to feeding 50 hydro workers on site, were now sending meals out to senior's apartments. With the usual evening meal volume of 250, Dietary Services was now preparing for 1200.

DAY 1 2 3 **4** 5

By Sunday, Day 4, we realized we were in an increasingly bleak situation. The city and the entire surrounding area had now declared states of emergency. The police were forcing evacuation in some areas and news sources were advising that it might be three to four weeks before the hydro would be restored to some homes. By the end of the day, though some guests had been picked up by family members outside the storm area, others had arrived. There had been several hundred guests so far in the shelter, peaking at 345 on Sunday evening.

It was determined, finally, that the administrative team simply had to find the time to convene a Command Centre group meeting. Unbelievably, this occurred for the first time on Day 4. The items on the agenda, though identified previously, had not been addressed in depth. They included:

- formalizing the system for runners;
- finding a method to deal with incoming inquiries;



- communicating with staff;
- reviewing attendance recording procedures;
- controlling and assisting with escalating emotions;
- modifying the reception centre;
- dividing tasks within the evolved (nursing office) Command centre;
- tracking guests;
- using public volunteers;
- covering the night rotation;
- long-term planning including scheduling time off; and
- clarifying departure procedures.

It was agreed that the Command Group would formally meet three times per day. The matter of planning for departures was a significant one. When electrical power was returned to the city, everyone would expect they could leave immediately. It was necessary to, put systems in place that would assure us that the seniors were returning to a safe environment. Although electrical power might be restored, the hospital would need to know, before having people leave, that there was heat in their apartments, the plumbing was intact, and spoiled food had been removed. A team was put in place to coordinate all departures, which included getting verification on the status of living accommodations, arranging transportation and in some cases, ensuring the individual had medication, oxygen and medical supplies.

DAY 1 2 3 4 **5**

By Monday, Day 5, though the numbers of seniors and other shelter guests were reduced, the numbers of service providers needing space had substantially increased. Upwards of 300 military personnel came to stay in the hospital, bringing with them not only huge appetites, but also huge vehicles requiring designated parking space.

Only now could additional energies be turned to staff support, which included investigating any needs for childcare. We also emphasized the availability of "private space" for staff who just needed quiet time away from it all. A major portion of the former nurses' residence was made available for staff and their families should they want or need accommodation or a place to cook meals.

By Day 11, all was relatively normal at BPH. Only 12 seniors along with the ever-present 300 military personnel remained.

Lessons Learned

Administrative Issues

1. Trust and use the prepared disaster plan, even if it feels like "overkill." It would have been much easier for us to implement the formal components of the disaster plan, then back off if any were not required. Instead, we found ourselves trying to catch up once everyone's time was over-committed to the tasks at hand.
2. If the exact duration of a disaster situation is unknown, anticipate a lengthy period at the earliest stage of planning. This will be important for such issues as staggering times off for a limited number of staff.
3. Establish and appoint key leaders and decision makers. As some managers will not be available, all managers need a working understanding of certain other departments to enable them to cover areas not normally within their jurisdiction. They need enough knowledge to be able to determine what procedures can be streamlined, what are the core essentials, and what can be deferred. This sort of flexibility comes from long-term team building with clusters of people. Both managers and staff have to know they can make decisions and will be supported.
4. No matter how enticing it is for administrative staff to roll up their sleeves and work along with everyone else to get the job done, those charged with managing a disaster must attend to those, perhaps less rewarding, control-group and command-centre functions. From our experience, managers must find a balance of planning and doing, as staff morale is indeed positively affected when all levels participate in the front line activity.
5. As part of keeping the emergency manual current, verify all phone numbers for staff and external contacts every three months. Dust off the disaster plan regularly. Find ways to keep it short, simple and flexible.
6. Hospitals should be aware that there will be a sudden blending of cultures that will require compromise, communication and patience. (We almost towed away military vehicles persistently parked in our fire lanes, but the CEO was scared of drawing small-arms fire.)
7. Allow for some trust, flexibility and the bypassing of usual bureaucratic processes to expedite getting on with the job at hand.
8. Time spent on preparation for something that does not happen is not wasted energy. Similarly, the waiting or down time caused by the ebb and flow of activity is to be expected. Those who are "too busy" at one moment need to be made comfortable with others having "nothing to do" at that particular time, and vice versa.

Communications Issues

9. Shut down all but a few selected voice-mail boxes. For us the voice-mail system presented two problems. Many staff members were phoning in to their supervisors, leaving voice-mail messages as to their unavailability or phone numbers where they could be contacted. Unfortunately if the supervisor was unable to report to work, no one could access these messages.
10. Have the area designated in the Disaster Plan as a Control Centre,

pre-wired for several internal and external telephone lines. Cellular phones, walkie-talkies and pagers do not suffice, especially when transmission towers are damaged. Hospitals should develop alternative plans that anticipate various communication systems being out of operation.

11. Maintain an accurate, current, alphabetized listing of guests. If the technology used for patient registrations is available, establish a parallel listing of guests. Make listings available to all areas that require this information — Command Centre, switchboard, public-information enquiries, departure area, clinical records.
12. Develop backup relief capacity for specialized areas. For example, if 50% of switchboard operators cannot report for duty, how will the switchboard be covered 24 hours per day?
13. Issue pocket-sized notebooks to everyone. There needs to be an easy, accessible and retrievable method of recording events. Much trial and error led us to conclude that office-based systems (computers), clipboards, and binders were impractical when people were moving throughout the facility.
14. When considering locations where numerous in-coming guests will be received, consider space that is accessible to vehicles so as to minimize disruption to normal functions within the institution. Consider also the logistics of transferring guests from the receiving area to other areas in the facility.

Staff Relations

15. There is a need to explain to staff at the beginning of a disaster the revised decision-making structure. In most healthcare facilities in the '90s, staff are accustomed to some form of participative management, and hence find it quite alienating to not be consulted. It would have served us well to explain the necessity to implement time-conserving decision-making practices.
16. Even when it seems there is no time, find a way to explain those decisions that might seem mean-spirited. As one example among many: at one meal approximately six or seven children of staff members appeared in the dining room for a free meal and by the next meal there were approximately 45 children. Given the pressures on Dietary Services and the fact the city had made other meal arrangements available to community members, combined with the worry that at the next meal there might be 145 children, a less-than-popular decision was made that staff could not bring their children in for meals. Understandably, this decision and several similar ones were unpopular with many; however, finding a way to convey the reasoning behind the decisions seems to have helped to quell the level of unhappiness.
17. Those giving instructions must use a different form of communication than usual. Since staff members are being asked to perform unfamiliar roles while preoccupied with the emotions and concerns related to a crisis, directions often have to be more explicit and step-by-step in detail.
18. Hospitals have many small departments that often do not have a centralized staffing process. A centralized location to which all staff can report is essential for manpower reallocation and attendance recording.

Inventory and Resources

19. Know how to access all resources after hours. For example, if purchasing staff are unavailable, can the hospital contact suppliers after hours?
20. Examine the impact of the "just in time" inventory system on a potential disaster situation. Does the hospital have adequate supplies to carry through the initial 48 hours of a disaster?
21. Once into a disaster it is difficult to gather up the supplies needed for a Command Centre. Necessary administrative materials should be pre-stocked in a specific location.
22. Similarly, new technology may negatively impact on the ability to respond to a disaster. With the new kitchenless kitchens, re-thermalization, and increased reliance on computerized systems, different methods of providing emergency services will have to be developed.

The foregoing notwithstanding, do not over-plan. The ever-shifting demands and predictions of severity around this disaster meant that we had to be prepared for almost anything.

We are assured from this disaster experience that hospitals can trust that, beyond their formal planning and preparation, there will be staff and patients who rise above the occasion to help ensure that the best is done for everyone involved.

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